

National Aeronautics and Space Administration



EDUCATOR RESOURCE CENTER

Fall 2008

ERO

National Aeronautics and
Space Administration

John C. Stennis Space Center
Educator Resource Center
Building 2105
Stennis Space Center, MS 39529-6000

Please Route to All Educators

John C. Stennis Fall 2008 Educator Workshop Schedule

Destination Mars

Tuesday, September 16, 2008

CEUs: 0.5

Grades: 3-8

These hands-on interdisciplinary activities are designed to increase your student's awareness and curiosity about NASA's upcoming explorations of Mars and help your students develop a better understanding of NASA future space explorations reinforcing the importance of NASA search for life on Mars. National Educational standards will be addressed in this workshop.

Happy Birthday NASA!

Thursday, September 18, 2008

CEUs: 0.5

Grades: K-4

We're having a party and you are invited! NASA will turn 50 this year and we will celebrate past, present and future NASA missions. This will be a fun-filled day of NASA curriculum activities that you will be able to use in your classroom.

Lunar Nautics

September 25, 2008

CEUs: 0.5

Grades: 5-8

"Lunar Nautics" is a technologically challenging and exciting curriculum that provides opportunities for students to learn about the Moon, its environment and its resources. This workshop focuses on research, discovery and exploration of the Moon by robots and humans, as well as other technologies for sustainability and advancement of future exploration.

"Lunar Nautics" features activities that challenge students in mission management, lunar exploration design, and scientific research. Educator and student guides, in combination with accompanying public domain software, includes information to teach the basics on Newton's Laws of Motion, rocket design, microgravity, and the lunar concepts.

Space Art

Tuesday, September 30, 2008

CEUs: 0.5

Grades: K-8

Learn how engaging arts and crafts projects can be integrated into your science classroom. A wide range of artistic media will be explored, such as sculptures, watercolors, mobiles, making jewelry and toys.

NASA curriculum resources will be explored and provided. Bring your creativity to an artistic workshop and make lots of fun-filled projects to take back to your classroom.

Exploration: Then and Now

October 1, 2008

CEUs: 0.5

Grades: 5-8

On October 1, NASA celebrates its 50th anniversary of exploration. This workshop focuses on the educational module "Exploration: Then and Now" that compares exploration of the past and present. The module focuses on the settlement of Jamestown, the first permanent English-speaking colony in the New World, and NASA's plans to return to the moon and reach for Mars. NASA curriculum resources, including inquiry activities, will be integrated into this professional development opportunity that will explore the many exciting components that have inspired Earth's explorers.

Power Up! The Technology behind

Today's Renewable Resources

Thursday, October 9, 2008

CEUs: 0.5

Grades: 5-9

From hydrogen fuel cells to solar panels of every shape and size, NASA has been in the alternative energy business for decades. This workshop will introduce participants to the basics of solar, fuel cell and wind turbine technology by demonstrating some

easy to use classroom activities including solar and fuel cell powered cars, and model windmills. Come explore the technology that already powers today's spacecraft, and will energize the homes and cars of the future.

Family Science Night

Tuesday, October 28, 2008

CEUs: 0.5

Grades: K-6

A Family Science Night is an evening program of hands-on science activities in which elementary school children and their parents can work together conducting simple, hands-on, inquiry-based, age-appropriate science experiments. Would you like to hold a Family Science Night at your school for students and their families? This workshop will guide you through the process for organizing a successful Family Science Night. Numerous tips to make your Family Science Night run smoothly will be discussed, and a wide range of fun-filled activities will be modeled.

Learning With the Stars

November 4, 2008

CEUs: 0.5

Grades: 4-9

Make the stars come alive in your classroom! This workshop will explore our universe, the Hubble Space Telescope (HST), and the space shuttle mission servicing the HST. NASA education curriculum resources, inquiry activities and the portable Starlab Planetarium® will be integrated into this professional development opportunity that will explore the many exciting components that have fascinated astronomers on Earth for thousands of years.

Living and Working in Space

Thursday, November 6, 2008

CEUs: 0.5

Grades: K-4

OR Thursday, November 13, 2008

Grades: 5-12

How astronauts live and work in space is a fascinating topic to kids of all ages. Engage your class with fun-filled hands-on activities about astronaut training, food preparation, exercising, health, and working in space. Using NASA resources, teachers will learn a variety of inquiry-based activities that translate the NASA experience into meaningful science applications for their students. The Teaching in Space program which is sending up two more educator astronauts on the Discovery STS-119 will also be highlighted. Choose only one day when you register for this workshop.

FIRST LEGO® League (FLL)

"Climate Connections" Kickoff Celebration

For teachers and students

Saturday, September 13, 2008

Grades: 5-9

FIRST LEGO® League (FLL), considered the "little league" of the FIRST Robotics Competition, is the result of a partnership between FIRST and the LEGO® Group. FLL extends the FIRST



concept of inspiring and celebrating science and technology to children aged 9-14, using real-world context and hands-on experimentation.

With the help of the LEGO® MINDSTORMS™ system, young participants can build a robot and compete in a high-energy robotics event specially designed for their age group. Returning and prospective coaches and team members are invited to this fun and fact-filled day to explore this year's "Climate Connections" challenge. Call 228-688-3653 for more information, or email randall.t.hicks@nasa.gov.

GLOBE Workshops: Global Learning and Observations To Benefit the Environment



GLOBE is a worldwide, hands-on, school-based education and science program.

For students, GLOBE provides the opportunity to learn by taking scientifically valid measurements in the

fields of land cover/biology, atmosphere/climate, hydrology and soil.

During GLOBE training, educators learn precise methods of collecting measurements.

Educators then teach students to collect data from sites at or near their schools and submit it to the GLOBE Web site.

Using this free, interactive site, students can create maps and graphs, analyze data sets, and collaborate with scientists and GLOBE students in 100 countries around the world.

To register, visit the GLOBE Web site at www.GLOBE.gov. Select the link titled "Learn About GLOBE," then look on the left and select "Educator's Corner" and then select "Teacher Workshops."

To locate the Stennis-sponsored GLOBE training workshops, scroll down and select the workshop locations listed for Stennis.

Prerequisites to fully implement the GLOBE program at your school are Internet access for students, a minimum of two GLOBE-trained educators per school, and written approval from the principal outlining interest in the GLOBE program and commitment to provide funding for the necessary instruments.

GLOBE Workshops Offered This Fall at John C. Stennis Space Center

These GLOBE workshops address national standards in science, geography, mathematics and technology.



**Elementary GLOBE
Thursday, September 11, 2008**

CEUs: 0.5
Grades: K-4

Elementary GLOBE was designed to introduce K-4 students to the study of Earth System Science (ESS). Elementary GLOBE forms an instructional unit comprised of five modules that address ESS and interrelated subjects including weather, hydrology, seasons, and soils. Each Elementary GLOBE module contains a science based storybook, classroom learning activities that complement the science content covered in each book, and teacher's notes. The storybooks

explore a component of the Earth system and the associated classroom learning activities provide students with a meaningful introduction to technology, a basic understanding of the methods of inquiry, and connection to math and literacy skills.

**GLOBE - Hydrology
Thursday, October 2, 2008**

CEUs: 0.5
Grades: K-12

What is the condition of the Earth's streams, rivers, lakes and coastal waters? Through the GLOBE hydrology investigation, you and your students learn to take reliable information on current conditions of surface water in your area. Through this GLOBE workshop, you will improve your understanding of the health of Earth's natural waters.

**GLOBE - Atmosphere / Climate
Tuesday, December 9, 2008**

CEUs: 0.5
Grades: K-12

Scientists around the world are studying the weather, through GLOBE your students can help too. Participants will learn how to take the needed atmospheric measurements to better understand our planet's climate. The measurements you and your students make through the GLOBE atmosphere program will go a long way in helping everyone understand more about the world's weather.



It's time to register for free educator workshops at Stennis Space Center



How to Register for Free Workshops At John C. Stennis Space Center

To make reservations, call the NASA Educator Resource Center at 800-237-1821 and select option 2, or call 228-688-3338. Please call between 7 a.m. and 3 p.m. Monday through Friday. Unless otherwise noted, all 0.5 CEU workshops will be held 8:30 a.m. - 2:30 p.m. National and state education standards will be addressed in science, technology, engineering, mathematics and geography in the workshops. For more information, e-mail SSC-nasaERC@mail.nasa.gov.

Notes on Stennis Space Center Educator Resource Center Workshops

Stennis Space Center ERC personnel consistently strive to ensure as many teachers as possible have access to SSC educator workshops. In order to maximize attendance at all workshops and events, please note the adjustments made to our registration procedures: Teachers may register for no more than three (3) workshops per semester and may only make registrations for themselves. If a participant is unable to attend a workshop, he or she must call the ERC at 228-6883338 as soon as possible. Failure to notify the ERC of a registration cancellation will affect a registrant's ability to participate in future workshops and programs.

For security purposes, you are required to check in at either the north or south reception center upon arrival at Stennis Space Center. A valid photo ID is required. Please allow sufficient time for this process when you arrive.

CEU Information

Mississippi and Louisiana educators are able to renew their teaching certificates with CEU credits from approved workshops. Unless otherwise noted, educators will receive 0.5 CEU credits for each 5-hour workshop conducted on-site. You must be present for the full workshop to earn CEU credit. The ERC maintains all CEU records. The ERC issues a certificate of attendance when the educator completes a 5-hour workshop. This certificate, along with any other CEU documentation, should be mailed by the teacher to the State Department of Education at the time of renewal. To obtain a copy of your CEU credits, a written request must be sent to the ERC.

New Safety Regulation

Please note that the use of hand-held communication devices (cell phones, two-way radios, etc.), is prohibited while driving on-site at Stennis Space Center.